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16090-23

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Attorney Docket Number

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Examiner Name					
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SAD		VOGEL et al. <u>Sensitization of highly porous, polycrystalline</u> TiO2 electrodes by quantum sized CdS, Chemical Physics Letters, Nov. 9, 1990, pp. 241-246, Vol.174,No.3,4, Elsevier Science						
SA		O'REGAN et al. <u>A low-cost, high-efficiency solar cell based on dye-sensitized colloidal TiO2 films,</u> Letters to Nature, Oct. 24, 1991, Vol. 353.						
		VOGEL et al. Quantum-Sized PbS, CdS, Ag2S, Sb2S3, and Bi2S3 Particles as Sensitzers for Various Nanoporous Wide-Bandgap Semiconductors, J. Phys. Chem., 1994, pp. 3183-2188, Vol. 98.						
9		Greenham et al. Charge separation and transport in conjugated-polymer/semiconductor-nanocrystal composites, Physical Review B., Dec. 15, 1996, pp.628-637, Vol. 54, No. 24.						
SA		Siebentritt et al. CdTe and CdS as Extremely Thin Absorber  Materials in an ETA solar cell, 14th European Photovoltaic Solar  Energy Conference, June 30, 1997, pp. 1823-1826, Barcelona, SP						
SA		Salafsky et al. Photoinduced charge separation and recombination in a conjugated polymer-semiconductor nanocrystal composite, Chemical Physics Letters, July 3, 1998,pp.297-303,Vol.290,No.4/06						
SP		Rost et al. <u>Transparent P-Type Semiconductors for the eta Solar Cell,</u> 2nd Wrld. Conf. and Exh. on Photovoltaic Solar Energy Conversion, July 6-10, 1998, pp.212-215, Vienna, Austria.						
Se		Bach et al. <u>Solid-state dye-sensitized mesoporous TiO2 solar cells,</u> Letters to Nature, Oct. 8, 1998, pp. 583-585, Vol 395, MacMillan Journals Ltd., London.						
Ge		Moller et al. A novel disposition technique for compound semiconductors on highly porous substrates: ILGAR, Thin Solid Films, Feb. 21, 2000, pp.113-117, Vol.361/362, Elsevier-Sequoia						
<b>W</b>	-	Bach, U., Solid-State Dye-Sensitized Mesoporous TiO2 Solar Cells, Thesis presented to Ecole Polytechnique Federale de Lausanne, 2000, Lausanne, Switzerland.						
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